

PHOTOIMAGABLE DIELECTRIC, ITS MANUFACTURE AND USE IN ELECTRONICS

ABSTRACT OF THE DISCLOSURE

Photoimagable polymers, as well as dielectric materials and their
5 manufacture and use in the production of printed circuit boards and printed wiring
boards are described. The polymers comprise between about 30 and about 70
parts of a polyfunctional resin and between about 70 and about 30 parts of the
condensation product of an epihalohydrin and a bisphenol based on 100 parts by
weight of resin. The polymer is cured by a photocationic initiator. It is
10 characterized by a glass transition temperature of at least about 140°C and a flex
fatigue life of at least about 10,000 cycles at a 3% strain. Optionally, less than 10
parts of a third specified epoxy resin may be added to the mixture to improve
flexibility without decreasing the glass transition temperature of the polymer.